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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,718	05/14/2001	Radislav Alexandrovich Potyrailo	RD-28,013	8673

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EXAMINER

VANORE, DAVID A

ART UNIT PAPER NUMBER

2881

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,718

Applicant(s)

POTYRAILO ET AL.

Examiner

David A Vanore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-20, 22-32 and 46-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-20, 22-32 and 46-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Arguments

Applicant's arguments filed February 24, 2004 have been fully considered but they are not persuasive.

Applicants arguments directed towards claims 1-11, 13-20, and 22-31 are not persuasive. The argument tendered as a traversal of the rejection of claims 1-11, 13-20, and 22-31 is moot because Nielsen teaches the required element of a solvent exposure testing device which applies varying amounts of a substrate across the surface of the substrate to create a variety of solvent exposure testing conditions (Note Col. 13 of Nielsen).

Applicants arguments directed towards claims 45-59 are not found to be persuasive. The traversal of the rejection of claims 45-59 under Nielsen relies on the argument that not all elements set forth in the claim are present in the prior art. Towards this end, the Applicant has argued that the limitation "applying varying test conditions across a substrate to form a pattern of test results" is not found in Nielsen, but rather that Nielsen synthesizes a variety of different products and then tests the products. At Col. 13 of Nielsen, there is disclosed an experimental regimen where a solvent is added in varying amount across the substrate to two distinct polymers. The act of varying the quantity of solvent applied to the polymers is a variation of a test condition as the experiment discussed investigates the effect of plasticization of the polymers with varying amounts of solvent added thereto. It is the opinion of the examiner therefore that the varying of the amount of solvent applied to the polymers as taught by Nielsen constitutes a variation in test conditions across the substrate.

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Applicants arguments directed towards claims 5-6, 26-27, and 49-50 are not persuasive. The applied thin film layer to the substrate contains a luminescent dye which therefore makes such a thin film layer inherently luminescent (Col. 8 Line 61-Col. 9 Line 10).

Applicants arguments directed towards claims 10 and 54 are not persuasive. The Applicant traverses the rejection of claims 10 and 54 on the grounds that Nielsen fails to teach a substrate comprising a plastic comprising a film. Nielsen teaches that the substrate further comprises a polymer film applied thereon at Col. 8 Line 61-Col. 9 Line 10.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-11,13-20,22-32, and 46-59 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Nielsen.

Nielsen teaches a device and method for optical analysis of a combinatorial array comprising the following in regards to claims 1-4, 7-9, 11-12, 15-20, 22-25, 28, 31-32, 46-48, 51-53, 55, and 56:

1) A combinatorial array having a surface with a plurality of predefined regions (Col. 6 Line 44-Col. 7 Line 14) comprising a plurality of spatially divided sample or reference regions measured simultaneously (Col. 10 Lines 64-68), where the regions

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may be concave or convex (dimpled or beaded), the array may comprise a substrate with a deposited coating (Col. 7 Lines 33-43) where the substrate may be comprised of glass, silicon, metals, ceramics (Col. 7 Line 64) and the coating may be transparent, opaque, organic, or inorganic (Col. 7 Lines 45-50. Nielsen further teaches the varying of test conditions across a sample array to test a variety of physical conditions including temperature exposure testing (Col. 12 Example 3). Since a physical test is being performed on the array of samples, Nielsen includes testing means such as an optical system (Col. 10) for measuring various physical properties of the array elements.

2) A radiation source for exposing the array to incident radiation of between 10^{-14} meters and 10^4 meters. (Col. 7 Lines 15-20).

3) A detector in the form of a CCD for collecting the radiation reflected from the array (Col. 11 Lines 30-40) where spatial filters compensate for the curvature or structures affecting the focus of the excitation radiation and an optical train filters selected incident radiation (Col. 11 Line 8-15).

4) A means for applying a test to each region of the array, in the instant case, Nielsen teaches a means for controlling the temperature of the environment (See Example 1 on Col. 11) and further teaches a solvent exposure testing device which varies the exposure of a solvent in a plurality of predefined regions (Col. 13 Lines 1-20).

5) A computer to control the system and determine the performance of each test region (Col. 5 Lines 22-45).

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Regarding claims 13-14, 29-30, and 57-59, Nielsen also teaches the use of a luminescent dye compound in each of the predefined regions (See General Overview starting on Column 7 Line 44).

Regarding claims 10 and 54, Nielsen teaches that the substrate may be a flat polymer thin film and defines a substrate any material having a rigid or semi-rigid surface (Col. 8 Line 61-Col. 9 Line 10).

Regarding claims, 5-6, 26-27, 49-50, Nielsen teaches that the substrate having a thin film deposited thereon which contains a luminescent dye. The addition of the dye to the coating material makes the thin film layer inherently luminescent (Col. 8 Line 61-Col. 9 Line 10).

Regarding claim 47, Nielsen teaches as pointed out above that the substrate is divided into spatially separate test regions (Col. 6 Lines 44-62), which means that there is space between disparate predefined regions on the substrate. The radiation source directs radiation to the totality of materials on the substrate (Col. 10 Lines 39-47) and a detector receives scattered radiation from all materials on the substrate (Col. 11 Lines 15-20). Therefore, Nielsen applies varying test conditions as pointed out above, forms a pattern of test results through this variation of test conditions, and detects radiation from the totality of the illuminated area including spaces between disparate predefined regions.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Vanore whose telephone number is (571) 272-2483. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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